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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,291	09/23/2004	Lars Gronroos	SEPP0-P003-US	3715
27268 7590 08/21/2007 BAKER & DANIELS LLP 300 NORTH MERIDIAN STREET SUITE 2700 INDIANAPOLIS, IN 46204				
EXAMINER				
CHOL PETER Y				
ART UNIT		PAPER NUMBER		
1771				
MAIL DATE		DELIVERY MODE		
08/21/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/509,291

## Applicant(s)

GRONROOS ET AL.

## Examiner

Peter Y. Choi

## Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.  
4a) Of the above claim(s) 14-24 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-13 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 23 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 09/23/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application.  
6) ☐ Other: \_\_\_\_\_

**NON-FINAL ACTION**

***Election/Restrictions***

1. Applicants' election without traverse of Group I, claims 1-13, in the reply filed on July 30, 2007, is acknowledged. Claims 14-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

***Priority***

2. Applicants' claim for the benefit of a prior-filed application under 35 U.S.C. 119(c) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicants have not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120, 121, or 365(c) as follows: Except for a continued prosecution application filed under § 1.53(d), any non-provisional application or international application designating the United States of America claiming the benefit of one or more prior-filed copending non-provisional applications or international applications designating the United States of America must contain or be amended to contain a reference to each such prior-filed application, identifying it by application number (consisting of the series code and serial number) or international application number and international filing date and indicating the relationship of the applications.

The term "continuity" is used to express the relationship of copendency of the same subject matter in two different applications of the same inventor. The later-filed application may be referred to as a continuing application when the prior application is not a provisional

application. Continuing applications include those applications which are called divisions, continuations, and continuations-in-part.

The relationship between the applications is whether the instant application is a continuation, divisional, or continuation-in-part of the prior nonprovisional application. A benefit claim that merely states that “this application claims the benefit of Application No. ---, filed ---” does not comply with 35 U.S.C. 120 and 37 CFR 1.78(a)(2)(i), since the relationship between the applications is not stated. In addition, a benefit claim that merely states that “this application is a continuing application of Application No. ---, filed ---” does not comply with 35 U.S.C. 120 and 37 CFR 1.78(a)(2)(i) since the proper relationship, which includes the type of continuing (i.e., continuation, divisional, or continuation-in-part) application, is not stated. Where a non-provisional application is claiming the benefit under 35 U.S.C. 120 of a prior national stage application under 35 U.S.C. 371, a suitable reference would read “This application is a continuation of U.S. Application No. 08/---, which was the National Stage of International Application No. PCT/DE95/---, filed ---.” Any benefit claim that does not both identify a prior application by its application number and specify a relationship between the applications will not be considered to contain a specific reference to a prior application as required by 35 U.S.C. 120. Such benefit claim may not be recognized by the Office and may not be included on the filing receipt even if the claim appears in the first sentence(s) of the specification or an application data sheet.

Applicants argue that the specification should be amended to recite “[t]he present application claims the *priority* of co-pending U.S. Application No. 10/257,761 filed January 14, 2003.” Applicants are not attempting to claim foreign priority to the PCT case from which U.S.

Appl. No. 10/257,761 is the National Stage Application of. Applicants are attempting to claim domestic priority to a non-provisional U.S. Application (which was subsequently issued). The MPEP requires Applicants to meet the requirements set forth above, which include identification of the specific relationship between the applications in order to be considered. As the later-filed, current U.S. application is not related as a continuation, divisional, or continuation-in-part to the prior non-provisional application, the later-filed, current U.S. application is not entitled to the priority date of the prior U.S. application.

Accordingly, the effective filing date of the currently examined Application is March 25, 2003.

### *Specification*

3. The disclosure is objected to because of the following informalities: as set forth above, the preliminary amendment adding “[t]he present application claims the priority of co-pending U.S. Application No. 10/257,761 filed January 14, 2003” is improper and is required to be removed. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the

specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1 and 2 recite that the density of the inner part is about 10 to 90% of that of the crust part. The specification as originally filed does not appear to disclose how to form the filler wherein the density obtained is about 10 to 90% of the crust part or how to find or measure the density associated with the inner part in comparison. As such, one of ordinary skill in the art would not be able to make or use the claimed invention as the specification does not disclose a method which can form the claimed invention having the specific density of the inner part in relation to the density of the crust part.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the claim recites a rotationally symmetrical shape and an inner part and a crust part. It is unclear if Applicants are referencing the fibrous web, the filler, or the fibrous web containing a filler. Additionally, claim 1 recites that the amount of filler used is “3 to 60% of the amount of solids.” It is unclear what Applicants are referring to when referencing “the amount of solids” as “solids” does not have proper antecedent basis within the claim.

Regarding claim 1-13, the claims recite the fibrous web “characterized in that.” It is unclear what the scope of the claim entails as “characterized in that” may be intended to include

only the elements recited or may be intended to include the elements recited in addition to other elements not recited.

Regarding claims 2, 4, 5, 7, 9, 10, and 11, the claims recite “preferably about” or “for example.” A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by “such as” and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. In the present instance, the claims recite the broad recitation and the claim also recites “preferably about” which is the narrower statement of the range/limitation. Additionally, the phrase “for example” renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claim 8, the claim recites that the crust part forms a “dense coat that surrounds the inner part.” It is unclear what is meant by a “dense coat,” specifically what the scope of “dense” is intended to be encompassed by the claim.

*Claim Rejections - 35 USC § 102/103*

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by, or alternatively under 35 U.S.C. 103(a) as obvious over, WO 01/79606 to Grönroos.

Regarding claims 1-13, Grönroos teaches a fibrous web containing a filler, which is a substance in granular form, having a rotationally symmetrical shape and an inner part and a crust part, whereby the density of the inner part is lower than the crust part, characterized in that the density of the inner part is about 10 to 90% of that of the crust part, and the amount of filler used is 3 to 60% of the amount of solids (see entire document including page 1 lines 3-26, page 3 lines 2-9, page 4 line 28 to page 5 line 31, page 7 lines 4-34, page 8 lines 9-19, page 9 lines 19-29, page 10 lines 3-29, page 11 lines 25-34, page 12 lines 5-9, page 12 line 32 to page 13 line 4).

Regarding claim 2, the density of the inner part of the filler granule is about 10 to 90%, preferably about 40 to 80% of that of the crust part (page 11 lines 25-34).

Regarding claim 3, the filler granule consists of pigment particles and a binder (page 9 line 31 to page 10 line 2, page 10 lines 19-23, Claim 27).



Regarding claim 4, the density of the pigment particles is 1500 to 7000 kg/m<sup>3</sup>, preferably about 2000 to 3100 kg/m<sup>3</sup> (page 7 lines 22-28).

Regarding claim 5, the density of the filler granule is 400 to 6300 kg/m<sup>3</sup>, preferably 600 to 2800 kg/m<sup>3</sup>, whereby the density of the inner part is about 50 to 5700 kg/m<sup>3</sup>, preferably about 700 to 1500 kg/m<sup>3</sup>, and the density of the crust part is about 600 to 6300 kg/m<sup>3</sup>, preferably about 1700 to 2000 kg/m<sup>3</sup> (page 7 lines 22-28, page 11 lines 25-34).

Regarding claim 6, the inner part of the filler granule contains rougher pigment particles in relation to the crust part (page 5 lines 5-12).

Regarding claim 7, the porosity of the inner part of the filler granule is higher than that of the crust part, whereby the pore volume of the inner part is 10 to 70% by volume, preferably about 30 to 60% by volume (page 11 lines 25-34).

Regarding claim 8, the crust part of the filler granule comprises metal silicate, metal sulphate or metal carbonate particles, which are bound to one another by means of a cross-linked binder, whereby they form a dense coat that surrounds the inner part (page 10 lines 3-11, page 12 lines 5-9).

Regarding claim 9, the filler particles of the filler granule comprise any inorganic substance, for example, kaolins, ground or precipitated calcium carbonates (page 10 lines 3-5).

Regarding claim 10, the particle size ( $\phi$ ) of the granulated filler is 1 to 100  $\mu\text{m}$ , preferably 5 to 50  $\mu\text{m}$  (page 11 lines 25-34).

Regarding claim 11, the substance in the granular form is plastically deformable under the effect of pressure and/or temperature (page 7 lines 30-34).

Regarding claims 12 and 13, Grönroos appears to inherently teach that the web contains 3 to 30% by weight of the filler in granular form, whereby the bonding strength of the fibrous web is essentially the same as that of a corresponding fibrous web that contains no filler and that the web contains over 30% by weight of the filler in granular form. In addition, Grönroos teaches that the thicker the coating layer applied onto the web, the better the properties of the coated base paper are covered in connection with the coating (page 3 lines 2 and 3). Additionally, Grönroos teaches the thickness of the coating is generally optimized so that desired coverage and degree of properties are achieved (page 3 lines 3-8). Absent unexpected results, it would have been obvious to one of ordinary skill in the fibrous web art to optimize the weight of the filler in granular form, as Grönroos suggests that the properties of the coated base may be manipulated by the thickness of the coating and that the coating is generally optimizable based on the desired coverage and properties.

In the event it is shown that Grönroos does not disclose the claimed invention with sufficient specificity, the invention is obvious because Grönroos discloses the claimed constituents and discloses that they may be used in combination.

***Claim Rejections - 35 USC § 103***

10. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as obvious over Grönroos in view of US Pub. No. 2003/0106658 to Ilmonen.

Regarding claims 12 and 13, in the event it is shown that optimizing the filler weight in the web would not have been obvious to one of ordinary skill in the fibrous web art, Ilmonen teaches a similar filler comprising kaolin and a binder wherein the fibrous web weighs 50-450

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$\text{g/m}^2$  or 30-250  $\text{g/m}^2$ , preferably 30-80  $\text{g/m}^2$ , and the coating weighs approximately 50-70  $\text{g/m}^2$  (Ilmonen, paragraphs 0003, 0005-0007, 0031, 0039, 0040, 0046, 0055, 0056). It would have been obvious to one of ordinary skill in the fibrous web art to form the invention of Grönroos, with the fibrous web and coating weights, as taught by Ilmonen, motivated by the desire to form a conventional fibrous web which is bright while maintaining the smoothness and the gloss of the paper.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571) 272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T Piziali/  
Primary Examiner, Art Unit 1771

/Peter Y. Choi/  
Examiner, Art Unit 1771  
August 14, 2007